

IN THE CLAIMS

1. -24. (cancelled)

25. (currently amended) A method of assessing a financial fraud risk within a distributed client/server system, said method comprising:

receiving first and second financial transactions from transactional information sources at a central computer system;

generating first features for said first financial transaction at said central computer system, said first features including probability information;

generating second features for said second financial transaction at said central computer system, said second features including probability information;

determining feature changes between said first features and said second features at said central computer system;

encrypting said feature changes at said central computer system;

transmitting said encrypted feature changes from said central computer system to a client computer system;

receiving a local, current financial transaction at a client computer system;

encrypting said current transaction at said client computer system;

generating local features from said encrypted current transaction at said client computer system, said local features including probability information;

comparing said local features to said received feature changes at said client computer system; and

scoring the result of said comparing to produce a fraud risk value associated with said local, current financial transaction, whereby the risk associated with said current financial transaction is assessed in a distributed manner.

26. (Canceled)

27. (previously presented) A method as recited in claim 25 wherein said scoring is performed using a risk prediction model.
28. (previously presented) A method as recited in claim 25 wherein said local, current transaction includes at-source data not generally available to said central computer system.
29. (previously presented) A method as recited in claim 25 wherein said first financial transaction, said second financial transaction and said current transaction all relate to the same financial account.
30. (previously presented) A method as recited in claim 25 further comprising:
- generating secondary features for said first financial transaction;
 - generating secondary features for said second financial transaction;
 - determining secondary feature changes between said secondary features of said first and second financial transactions;
 - encrypting said secondary feature changes; and
 - transmitting said encrypted secondary feature changes from said central computer system to said client computer system.
31. (previously presented) A method as recited in claim 25, further comprising:
- generating enhanced features as result of said comparing; and
 - transmitting said enhanced features to said central computer system.

32. (currently amended) A distributed risk assessment system for assessing a financial fraud risk, said system comprising:

a transaction engine that produces first and second financial transactions;

a profiling engine of a central computer system that receives said first and said second financial transactions and generates first features and second features of said financial transactions respectively, said first and second features including probability information;

a clustering engine of said central computer system that stores said first features and said second features into a cluster database;

a replication engine of said central computer system that determines feature changes between said first features and said second features, and encrypts said feature changes;

a database of a client computer system that stores said encrypted feature changes;

a local engine of said client computer system that receives a current transaction, encrypts said current transaction, and generates local features from said current transaction, said local features including probability information, wherein said local engine also compares said local features to said encrypted feature changes and scores the result to produce a fraud risk value associated with said local, current financial transaction, whereby the risk associated with said current financial transaction is assessed in a distributed manner.

33. (Canceled)

34. (previously presented) A system as recited in claim 32 further comprising:

a risk prediction model of said client computer system used to produce said fraud risk value.

35. (previously presented) A system as recited in claim 32 wherein said current transaction includes at-source data not generally available to said central computer system.

36. (previously presented) A system as recited in claim 32 wherein said first financial transaction, said second financial transaction and said current transaction all relate to the same financial account.

37. (previously presented) A system as recited in claim 32 wherein said clustering engine further generates secondary features for said first financial transaction and secondary features for said second financial transaction, and wherein said replication engine further determines secondary feature changes between said secondary features of said first and second financial transactions, and wherein said replication engine further encrypts said secondary feature changes and transmits said encrypted secondary feature changes from said central computer system to said client computer system.

38. (previously presented) A system as recited in claim 32 wherein said local engine of said client computer system further generates enhanced features as result of said comparing and transmits said enhanced features to said central computer system.